1928

28-1. Box Elder Canon
E of Brigham, Utah
VIII. 9. 1928.

A. Sage brush and dry grass slopes, base of trees. jet.

B. green grass & weeds beside stream, similar slopes jet.

Cratynedes juv locally in green grass B

Dissost. cav ibid in dusty areas A & B

Nyphia pseudon mod large colonies in green weedy areas near stream B.

Dissost spurc mod large colonies in slow dry yellow grass among sage on steep slopes A

Mel pacificus small nos gen distr.

Mul near canonic
pro in brush on
hillside, partic a
sage brush like blue-
green bush A
Iris fontana very
pro base spots B
Lin nebula accord
same B.
Hesp. viridis same
as mul near canonic
very pro A & B
Phoetaliotes small
mos locally B.

0 + 37 = 37

1 Amandavid in tip of
sage brush.

Lepus interior 1 H bar
steep slope among
sage brush A.

✓ 28.2 Mantua, Box Elder Co. Utah 5400 ft. VIII.9.1928

Aspect small mos in short green composite edge of field

Schist lucidus? mod mos in high green weedy area, same. 3H

Que R. lobatum 9. calif. jungylinus prom low trees along wash

Trin pallidiflorum

Trin paludosum 1H on road.

Phacelia purcella 2H as schist lucidus — (3 same).

Disact car 1H in dusty place

21 + 37 = 58

✓28-3 3 mi n of Manila
Wasatch Mts, Box Elder
Co. Utah VIII. 9. 1928
5800 ft.

near dry stream
on slopes with much
"cow cabbage" (a broad
leaf plant) P & in leaves
curl and turn yellow
with growing - leaves
plant & same age.
Pub near or = utahensis
locally ~~ward~~ mes,
powerful jumpers
using their wings also,
usually make for
thicks spot when
disturbed.
Steirox tuliecellus
same, not as many
Pub tweet same,
accent. 5R 11H
Pub dorsum Dance
accent.

Mel mix small
nos same (abiquit
& very common 28-1 & 2
Cuphia pseudon fee
Cirsi nabula small
nos in bare spots.
Trim portana fee
same.
Chor curtip fee at
lower levels & more
same near bunches
of oat grass (28-3, A
= Elymus condensatus (Presl.),
on margin of stream
bed (dry, deeply cut)
Pseudop bracli all at
in bunches of oat grass.
Mel confusus all at
small nos in same
area.

58 + 132 = 190

✓28.4 Logan Canyon, Bear River Mts., Utah VIII.9. 1928 5000 ft

all # 1 D carolina
1 D pulana
2 C nabula

190 + 4 = 194

Card Canyon Ranger Sta.

✓28.5. VIII.9.1928 Ibid. ~~5400-5500~~ 5200.-5300 ft (M. Hebard)

3 Capnobotes occidentalis H

In juniper on very steep canyon slopes — small nos. third after dawn but more numerous and less wary than is usual — as a rule perched in thickest part of juniper near top and well in tree — usually climbing slowly about in tree deliberately — If startled they give a great jump & fly away

194 + 3 = 197

28.6 Logan Canyon, 5800 ft. VIII.10.1928.

Hillside covered with cercocarpus zone. Low recent. Aspen thickets. Very poor loc.

Senecio 1 R in loose green volcanics.

Trifolium 2 ft small mos gen scattered in open.

M. dawsonii 2 ft some

Lithospermum fed in beere opens 1 H

Erigeron fed gen down in open 1 H

Trifolium fontanum fed as nabecka

197 + 8 = 205

1 Cicindela H

√28·7 Red Banks,
Logan Canyon, Bear
River, Mts, Utah 6400
pt. VIII.10.1928.
Stir. ~~tri~~ pallidiff
mod common in area
of "corn cabbage" (plant
A = Wyethia amplexicaulis Nutt.).
Mel utahensis common
sandy.
Brunnia very fed
sandy. 18R 2/7H
Mel. oreg very fed
sandy in mountain
meadows.
Cactus sp. small non
gen distr in Potter
J. occidens sandy

205 + 68 ± 273

✓ 28.8 Logan Road Pass, above Garden City, Wasatch Range, Utah. VIII.10.1928
7800-8000 ft. Bear River Mts

Slopes of sage & cereal zone herbage.

Mel. infaustilis all ✱ or few in sage 7800-8000
Iris scott few general
Cralegus " "
C. nabula " bare spots
Brunnera 1 ✱ only
one seen in herbage 7900
Steiros 1 ✱ 8000 ft "
Antlia frigida 1 R 7850

273 + 15 = 288

✓28.9 Montpelier, Idaho
5950 ft. VIII.10.1928
Bear River Marshes
Short grass w areas
of marsh grass, sl
alkaline soil.
Metator 1♂ only one seen
Arphia pseudonietana fed, 1♂
nestobr Reowa very
common everywhere, much
the most abdt sps.
Camnula common locally
Neel fem-nebr mod
common, particularly marsh
grass.
Acrydi gracilis on bare
ground near pool 2♂, 1♀
fed
Nel packardi rare
Spharag 2♂, fed in
short grass.

288 + 34 = 322

Camnula 1 specimen 1 Rin
marsh grass
Arphidella 1R same

28.10 Georgetown Canyon, Caribou Range, Idaho.
Preuss 6650-6800 (?)

Neel very few in canad under & under aspens

Frill only few on sage br slopes w dry cound nitu herbage not thick

Culoc juncoid 1 pt same all new

Brunnuria 10 pt (10 letter only new.

Eralyp occasl

Amphit rarall. mos in grass, particl in areas of dumps of coarse tall grass

322 + 14 = 336

+2 = 338.

28.11 5 mi N of Georgetown
Ida. VIII.11.1928. 6350 ft.
Sagebrush plain
much dry grass
Steirox 1H in sagebrush
Trim campestr fed
locally 3H
mel infantilis very
common.
Aulac occasional.
mel mixic comm

338 + 15 = 353

28.12 Pebble, Port Neuf
River, Ida. VIII.11.1928
5270 ft.
Dissost coer 1R sm nos
Amphia comm
Vestobex "
Amphit locally in
high grass bunches
all R
mel pallescens see
Sagebrush and grass

with series of bunches
of high grass

353 + 18 = 372

28.13A5 Snake River Desert,
5 mi E of Taber, Idaho. 4200
ft. VIII.12.1928

Volcanic adobe, sage
brush, & good desert
weeds & Russian thistle

~~Dissost car 1R~~ ~~[illegible]~~

Desot very few

Trim hirist few and
widely scattered
small colonies

~~Trim campestr 1H~~

~~Mel ind 1H R~~

1 Ala. H tried in sage at night)

372 + 14 = 386

28.13B 2 mi west of Taber Sta.
Snake River Desert, Idaho.
4400 ft.

Mel. alier 1H

Trim campestr ? 1H

Trim vilis 1R

Trim grac 1H similar to
13A but more dry yellow grass

28.14 3 mi west of Pioneer
Snake River. Idaho
VIII.12.1928 5000 ft.

Trin neomexicanus common
on sandy gray-brown soil
among sage brush, bare
areas for xeric desert plants.
Aeroke c. Strep 2H all seen
Tetrau

386 + 95 = 481

28.15 Base slopes SE end
Big Lost River Range E of
Arco, Ida. 5200-5250 ft.
VIII.12.1928.

Aeroc 1H in pebbly
cover at base of mountain
Trin neomex on bare
sandy gray-brown soil
among sage brush wash
at foot of hills.
Ambloj 3H in coarse twig
low brown brush on
lowest slope all seen Tetrau
Strep 3H in dried up
small composite among
ibid.
Mil sulc among low
desert brush there 1H

Artemisia tridentata 1H
Mel micrum 1H in sage same site.
Sporobolus cryptandrus 1H in sage brush on flat, only one stem.
Triset ~~spicatum~~ spicatum
grass in almost bare slope in some low desert veget among junipers at 5250 ft.

481 + 27 = 510
Butte Co.

28.16 Arco, Idaho ft.
VIII.12.1928
Lomatium watsonii well Triset spicatum on bare gravelly soil among large green opposites in vacant lot

28.17 510 + 6 = 516
Mackay, Ida. VIII.12.1928
Custer Co. 5900 ft.

High sage brush flat near stream — mixed green grasses & weeds.
Bare soil the foll-
Triset canescens Fed
Triset benefici off Fed
Triset gracilis Fed

510 + 10 = 520

28.18 E slope Big Lost River-Salmon River Road Pass 6700 ft. VIII-12 Gradual slopes with sage, dry fine grasses & ground mountain phlox.

Acrolophus 1 WWF very scarce

Dicot 2 " "

Nel infantilis locally common (1 Sept)

Prime bumeri off 1 R

528 + 8 = 528

28.19 Big Lost River-Salmon River Road Pass summit 7165-7300 ft. VIII-12

Nel infantil v common in low grasses (dry)

Dompha clavatus 3 of M in areas of tufts of tall dry grasses 7170-7300

Wonderful low mountain plants among flat rock pavements & heers

528 + 10 = 538

✓ 28.20 Head of Warm Springs Creek, W side of Lost River Mts, Ida. 5900 ft VIII.13.

Arnoch 1H

Cratyp 1H

538 + 2 = 540

✓ 28.21 Warm Springs Creek, W of Lost River Mts, Ida. 5350 ft. Lava fragments gray in, altered & some composites. VIII.13

Dmot very fad

Phim most locally in small nos

Arnoch fad, widely scattered

540 + 18 = 558

√28.22 Salmon River near Morgan Creek, n of Challis Ida. 4400 ft. VIII.13.
Detrital slopes of Salmon River Mts, atriplex, grayia & sage.
Trifolium eriostemum mod nos on bare soil among sage, just at base of mts.
Trifolium helianthemum 1 ft R same
Trifolium nemorum near fontana on north pragment beginning of slope.
Trifolium microcephalum near uniform color all R
Trifolium cyathiferum fad on steep north pragment slopes, all above fad at least 50 ft, all at no juniper about.
Thelypodium paschasii 1 ft in area of dry yellow bushes on steep slope only orts seen there
Thelypodium-nuda in wet meadow WWF
Lomatium ibid

Mell atl / ne on "mellinde

558 + 27 = 585

28.23 Cow Creek at Salmon River, Lemhi Range, Ida. VIII.13. 4250-4400 ft.

Conozoa on bare soil openings of aspen grove, very common.

Coriot medullat scattered over steep north facing slopes, gen mod nos.

Frim pallidip some co conozoa — fed.

Mell mex mod nos in dry on steep slopes

Lenpit on steep slopes & dry, and partic in areas of numerous tufts of a fine yellow grass 1R, Others H. Very fed

Brunaria sordida 1 of R others H. some.

Mel idaho ~~[illegible]~~ 1 of 17 it range west, all seen this, the road jumped out on bare rock fig[illegible] side

Cratogn very few on steep slopes
Mel pedicardi 1 R
Mel ~~mellitus~~ Dendrinnis webbiensis
20 1/7 R, others H.
The sage brush steep north facing slopes, from bottom to upper cliffs, but common only on very steep upper slopes where there were many tufts of a fine yellow grass. A porcupine cut down deeper sagebrush U. dorsii terminis, but instead of immediately jumping into another bush this ins usually jumps about in the open and is always much easier to take

585 + 80 = 665

28.24 Ten mile Creek, at Salmon River Idaho. 4450 ft. VIII.14.

Sage brush flat & slopes & rock slides areas of short fine yellow grass "sheep-grass" (poor collecting) near firs.

Erythronium mead nos on flat.

Mel Fabellifer 2R some only ones seen.

Mel inquilinus 1H, same, same.

Trim campestris 4H, same, mixed nos widely distr. This ins flies up with a higher erratic flight, mean gracilis, making my illimitent error.

Bombus sonchidae 1H same, only one seen.

Deuphut colo 1 or 4H same, same.

Colo alleghe 1H same only seen seen

Null mix occul very freq
Eriot undul fed on
rocks shrubs, C Tolson

665 + 19 = 684

28.25. Salmon City. Dbaw
ridges to west of town,
much sage, some
composites. 4000 ft.
VIII.14
Sphenog signata fed
on flat areas among sage
Phrin campestris very
fed same
Lepthis pseudomus
small nos seen
Deiot mirig is rabbit weed
Hay nilequinum
small nos as S signata
Phrin cynocephalus one
small colony at summit
of ridge 100 ft
Cultipa 1 as S signata 100 ft
Mustoler 1 # 100 ft, same,
all seen taken.
Phrin crist mod
common locally
Null bivitt 1 fed in cultivated
veg

Well increases see it
Second in Tall, very.
gray sage along river
area.
Well enthusiast very
scarce.
Driest year fed
Color Alleotti fed as
S. equale.
Well Spaldardi near
irrig tract S. also fed
out in sage.
Prim. gracilis it only
one alm as S. equale

684 + 79 = 763

28.26 Lower Canyon of
Morgan Creek Salmon
River Mts, Idaho VIII.15.
4550 ft.

Cinc mexicanus IR on
bare rocks side slopes,
seen occas in same
vegetation up to
5700 ft; no higher

763 + 1 = 764

28.27 Morgan Creek Summit
Salmon River Range, Ida.
VII.15
Forest of lodge pole
pine & some fir & scanty
upper canadian undergrowth
Trim. ruff. fed along
edges of small open
spots.
Mel oregonensis in widely
scattered very small
colonies in scanty forest
undergrowth.
Camm. pellucida one
mod large colony
~~of~~ in short dry bud
green grass in glade.

764 + 20 = 784

28.28 Morgan Creek, 7300
ft. VIII.15 Same em-
bed more undergr.
Crataegus 1
T. suffusus 1
Cammula 2
Mel. oregonensis 1 1/17

784 + 6 = 790

28.29 7080 ft. Morgan Creek, Salmon River Range Ida. VIII.15.1928.

Open hillside surrounded by forest with loo cover largely of alpine ~~plants~~ plants, some sage (goes to summit)

Brunneria sordida not common on steep open hillside covered w low mountain plants & same plants, short grass.

The males are much more active than the females, taking a succession of 8 read) jumps downhill & coursing. diff to capture

~~Not individuals or one occasional~~

~~Not alpines~~ " " same

~~Not mountains~~ locally pro, usually near sage.

steiroxys (pro R ed) foot of slope in loo herbage

Trim suppose accord, gra
dester
Cumula in dry grass
of flat area.
Crataegus 1ft on hillsi

790 + 70 = 860

28.30 6650 ft upper
canyon, Morgan Creek,
Salmon River Mts., Ida.
VIII. 15. 1928.
Mel ~~[illegible]~~ i, midges locally
in sage, partic near
aspen thickets.
Cratyp small nos
on sage covered hillside
all ft.
Xanth. c. buckelli 2 R
in dry yellow grass
on flat, all seen taken
Cumula very common
same.
Mel artemisiae all ft)
small nos in sage
on hillside, hard
to capture as the sage

brush was large & thick.

Trine suffusus Jud.

860 + 30 = 890.

✓28.31 Morgan Creek, 5850 ft. Salmon River Mts., Ida. VIII.15.1928

Beside little valley, rolling hills of sage, yellow grasses & some plants.

Inhospitable poor locality

Mel. infantilis Jud

Cratyp

890 + 2 = 892.

✓28.32 Salmon River 2 mi below East Fork, Ida. VIII.16.1928 4800 ft.

Sandy adobe flat & rolling hillsides with prickly pear & few tufts of yellow grass. Grazing dominant on flat, sage on hills

Acrocephalus 1H on flat, only one seen.
Cordilis 1H in grassy spot on Willow. Only one seen.
Prunella gracilis WWT among sage on flat.
Prunella chiti small nos locally on flat in grass & prickly pear areas
Dendroica all W, very fed same.

892 + 21 = 913

28.33 Salmon River, near mouth of Freon Creek, 1 mi E of Robinson Bar, Custer Co. Ida. 5800 ft.
VIII.16.1928
Sagebrush & scattly grasses in open Fir forest around
Amabrues sbrid. vociferously dzit-dzit-dzit-dzit-dzit in top spray of sage, then appr within 20 ft. and as usual

started to scramble down to its hole at base of brush when approached closely.

Crotalus 1H

913 + 2 = 915

28.34 Stanley, Custer Co. Ida. 6250 ft. VIII.16.1928

Trim suffusus open areas almost bare in lodge-pole pine forest 1H

Chortophilus 1H in area of pine mountain marshy grasses.

Sturnella 1♀R on edge of dam near dam.

Circotundus common on steep rocky slopes with little to dam, grasses & some with plants 1H

Crotalus pedes small numbers dam.

915 + 7 = 922

28.35 Dicker Fund, upper Salmon River, Custer Co., Idaho. VIII.16.1928 6700 ft

Xanthe c. bulbelli Area of fine grass on shale gravel flat, a little low sage. IR

Oralyp 1R 1H same

Grim near modesta blue green aggregate ct same. ~~S~~ Scattered mod large colony-fly up quickly with a buzzing drone and are very hard to follow, blending in the background utterly.

Cammelia scarce same

Mel mel few scattered same.

922 + 13 = 935

28·36 mouth of Smiley creek, upper Salmon River, ~~7300~~ 7200 ft
VIII·16·1928. Blaine Co. Idaho

Calamagrostis IR, ~~[illegible]~~ sage in the yellow grass, spring in sage.

Crataegus ouvae 3. in valley & on border of lower Hedysarum prairie.

935+4 = 939

28·37 Head of Sawtooth Valley at base of Dakota Pass, Custer Co., Idaho
VIII·17·1928. 7400

Sagebrush flats with lupine and mountain flowers, areas of grass very poor collecting

Crataegus ~~[illegible]~~ mod. nos. gen. distr.
xanthi. c. duchselli

IR

939+6 = 945

28.38 West side Galena Pass, Sawtooth Range, Idaho. 8200 ft. VIII.17. 1928 Custer Co.

Steep slopes with dry pine grasses, mountain plants & some sage.

Crataegus moderate numbers, generally distributed

Mel alpinus the sam-

28.39 945 + 11 = 956

Galena Summit, Sawtooth Range, Idaho 8750-9225 ft. VIII.17.1928.

Mel militaris. just below summit on very steep and almost bare slopes of sandy soil & very small rock fragments, dotted with low midsummer plants. The insects are found on the bare soil just spring for safety to the plant thickets, They are clumsy but occasional males would

suddenly develope
astonishing vigour —
They invariably jumped
~~sideways~~ obliquely up
hill with a sure, strong
wind which was blowing
instd. of downhill, as is
the usual act of mountain
species. They bounded
astonishingly in the soil
and partly in gravel
(sample 28-39A = Eriogonum
subalpinum Greene),
as did the Bradypodes
30↗34 R, 25↗17 H, 9150-7200 ft.
Bradypodes 14 R, 15↗WNW 7, 30↗27 H
same — Very scarce, these
all that were seen while
taking the large series of
milifaris. ~~indigens~~ indigens
Pul ~~indigens~~ all H
In grass and among
herbaceous plants
near ~~to~~ the pines &
pns at summit. V. scarce
Bruneria all H same.

Circot nudum 1 R 1 H Fed
on bare soil of small
circular excavation
on south face at summit
covered by presence there
of ice & snow late into
the season 9150 ft.
Trim suff Fed on south
slope near pines & firs
thinly area of mountain
plants & some sage
1 H 8750 ft.
Vacc alpinus mod nos
there up to 8700 ft.
Vacc myr 1 W W F there 8750
Hexorus 1 W W F the same
heard a single female stick
in sage at 8700 ft but
did not locate it
Crat pedes same.

956 + 90 = 1046

28.40 ✓ Upper Wood River, Blaine Co. Idaho 7200 ft
VIII.17.1928

Sage brush & dry grass

Circot undul all H, common in sunder screen ridge in such surroundings.

Camassia R

Frim puff small numbers.

Frim mic 1 R

Crataep

1046 + 18 = 1064

28.41 ✓ Croy Creek 6 mi SW of Hailey, Blaine Co. Idaho. 5275 ft. 17

Grassy areas with sage, much Lupine & areas of cow cabbage.

Aplia pseudonit small nos, general

Mustober all H very scarce.

Amphilorus 2 W of scarce

Coreopa common in

colonies on bare soil along roadside. Seen also in road at Ketchum, Blaine Co. at 5823 ft.

Trim near poulsen occur on pebbly area near road all ft Vul packardi fed Cralyp most common

1064 + 31 = 1095

28.42 ✓ 3 mi E of Soldier Ida. 4700 ft VIII.17.1928

Hsp need-l wing 1 ft in large composite

1095 + 1 = 1096

28.43 ✓ Camas Prairie, 4 mi. W. of Hill City, Idaho. Elmore Co. VIII.18.1928.

Rolling low hills with sage, dry grass, some lupine etc.

Trim gracilis fed Arphus pseudon " amphitorius very fed Trim poulsen most

common partic in areas of bare soil — This seems to be one in very near the forest dwelling type but with less yellow (pale yellow w a greenish tinge in flight) and females very much larger though the males are scarcely larger.

Mel. pachandi fed in dry, drifting in grass on rocky border of wheat field in here they were and common

Mel. nel same

Trim. camptr. fed as pretiana, very wild and alert.

~~Trim~~ Circot. nudul very fed, same, all H.

1096 + 41 = 1137

28.44 Hills 7 mi SW of
Dixie, Elmore Co., Idaho,
4600 ft. VIII.18.1928

much yellow grass in
appar burned areas.
usual sage elsewhere
Prime poulsenii mod
common parts in bare
areas.
Prim gracilis small
nos in sage
aquilegia mod comm
locally in yellow grass
at foot of hill.
Castilleja occasional

1137 + 33 = 1170
34

28.45 5 mi N of Caldwell
Idaho. 2500 ft. VIII-18-1928
Canyon Co.

Flat country of volcanic adobe soil, heavy cover of sage with much bee weeds grass (Bromus tectorum). Very monotonous. Neo cinerea gen common in sage, in some places in great nos. Almost exceedingly active as springing & flying with great rapidity in the heated heat. Ced unguica locally in small nos in sage. Trim. Lattifasc common in colonies in areas of pure adobe. Alert & powerful flyers but not as diff to take as ind of this or some are. Trim cuneicii ~~cuneepennis~~ small nos locally in sage, all #

Durst & Riley 1R on adobe in sage brush.

1170 + 64 = 1234

28.46 Sand Run Gulch, N of Caldwell, Ida.
VIII.18.1928. 2500 ft
All ♯

Trim shrema fm along wash in sage & some composites.

Full mex!

Trim caeruleipennis feeds shrema

Hesperolettix lw 2d in large gray-green composite (28.46 = Chrysothamnus nauseosus albicaulis Hall). Their colored agreed exactly with this plant.

1234 + 8 = 1242

28.47 6½ mi east of Vale
Malheur Co., Oregon. 2250
H. VIII. 19. 1928
Adobe flats with
sage & sarcobatus &
grassy swales, some
salt grass.
Hesp 2H in large bushy
green composite, very
scarce.
Orphanella 1H in salt
grass.
Trim cristata mod
nos on bare adobe
locally in bare spots
& in sage & sarcob.
Mel fem-mel in grassy
swales
Mel cinereus mod nos
in sage.
Trim latifasc locally
in small nos in
areas of bare adobe
Dero tin 1H only one
seen, same.

Conoz in small colonies on borders of grassy swales.
Iris gracilis fwo in sage brush
Iris caerulescens 1 sum same, not Tulsa.
Neil packardi

1242 + 42 = 1284

28.48 1 mi. E of Vale, Malheur Co. Ore. 2200 ft
VIII.19.1928
Sage & sarcobatus flat mid steep sage hillside
Iris cyanescens all ft, fwd among sage (no juniper anywhere) on lower steep slopes.
Iris caerulescens mod nos same & fwd on sage & sarc flat
Iris gracilis common on latter, the brush was heavily supplied

to a rusty red specimens
and a number of the
specimens show a
marking strikingly
similar
Conozoa on flat
Agenor fed in fine
short yellow grass of
hillside
colog. now on flat in brush
1284 + 50 = 1334

28.49 Lava bench NW
of Brogan, Malheur
Co. Oregon, VIII.19.1928
4350 ft.

High plain of sage
& short dry yellow
grass
Agenor fed in grass
Trim gracilis fed in sage
Trim pratana "
Mel-pachs fed in yellow
grass

1334 + 15 = 1349

28.50 Alkali flat east of Bonita, Co. Ore.
4250 ft VIII.19.1928
Cordillacris 2H 1W 10F In salt grass in adobe area white with alkali. Close search for some time resulted only in these.
Aulocara sanae, as scarce
Orphulella sanae 1W 1F
all seen over extensive area examined
Nestoba mod nos locally sanae.
Trim pallidip
Nel. att mod nos sanae
Nel Jenner-n
1349 + 30 = 1379
Trim gracilis 1H

28.51 Eldorado Summit, W of Ironside, Ore. 4650 ft VIII.19.1928

Some mountain herbage, much sage. Good appearing but very bad for collecting

Sanmuela one colony in pasture grasses

Mel f-r ibid

Mel mex

1379 + 8 = 1387

28.52 Baker Co. 4 mi E of Summit Wallowa Nat. Forest, Oregon VIII.19.1928. 4450 - 5000 ft.

Mel ~~europaea~~ repetitus 28 14 H in forest undergrowth at 4600 ft. Yellow-pine, Douglas fir & spruce. Very scarce this only these

Chort curtip all H fed & dried in scarcely coarser short green grass in forest - this does not grow closely, the ties

talles quad Leaps and
N slope 4500-4700 ft
is extremely acidic. Its
Quadrat
sections, are certainly
not normal for the
marsh-loving curtipennies
Vul alpinus all H.V. Feed
in forest needing 4500 to
4600 ft on north slope
Senice neff gm. distr in
mod mos there dry
undergr of forest, partic
in spots with little
vegetation, N. slope & valley
Acerocks all H 5000 ft
on gravel & rock fragm.
of flat at summit, wholly
bare of veget - The trees
coming up the N slope
appeared like timber line
cond - stunted, bent &
mossy - but among them
were juniper.
Senice fontana mod
mos on less boreal
open south facing
hillside.

1387 + 47 = 1434

28.53 Summit road pass
Baker-Grant Co. line
Whitman Nat. Forest,
Oregon. 5095 ft. VIII.20.1928
Heavy forest of conifers
Ne. ~~neomexicanus~~ neglectus R17.37 very
scarce in forest undergr
Chorf. antip sance.
Calypedes 1
Trim suff gen distr in
moderate numbers.

1434 + 22 = 1456

28.54 Strawberry Creek, E
slope Strawberry Mts.,
~~Baker~~ Grant Co, Oregon. 4450 ft.
VIII.20.1928
Conifer forest, largely
pine.
Nel. bruneri 2R in
scrub spots with
dwarf undergr about
1 ft high.
Trim suffusus
common
Calyp mod comm

Mel Everitt edge of
Wheat field R
Mel ~~Delphinium~~ 1R
in forest under gr.
Chord R in forest and
few, widely scattered
Cunnula on road
in open R
Trim fontana down
locally same, now
in forest.

1456 + 53 = 1509

28.55 Hill slopes NE
of Prairie City, Grant
Co Ore. 3500 ft. VIII.20.1928
Open steep hillside with
much yellow grass,
few composites and
other plants. Very
poor collecting
Dedaleonolus very scarce
in yellow grass, not gined!
Aspidia pseudoc few
same
Aulocara elegotti 1 WDF
1509 + 5 = 1514

28.56 Strawberry Peak. VIII.21.1928
Blue Mts., Oregon.
8900 ft. At this elev.
White-bark Pine (OK)
Pinus albicaulis,
timber line condition
gravel & rocks fragmented
w small mountain
plants — long search
Mel ~~arcoptilus~~ repetinus 1♂ 4♀
nothing else & slide
rocks peak w scant
alpine plants carefully
examined to 9640 — 0.
1514 + 2 = 1516

28.57 Strawberry Peak
Trail, Blue Mts., Ore.
7100 ft. VIII.21.1928.
P. ponderosa
Opening in yellow pine
forest on dry ridge,
SE slope.
Mel. ~~arcoptilus~~ repetinus few
in scanty patches
of forest vegetation

Calyp. st in short grass
of open space.
Trim fontana grd
same
Trim suppsus same
& grd in forest opening
very grd above this
point but I pro seen
in mountain herbage
near fox Tail pines at
8400 ft. This was very
surprising.
Cyphoderris I got st
under piece of dead
wood near forest
edge, long search
failed to find others,

1516 + 22 = 1538

28.58 Middle Union Peak,
Strawberry Peak, Blue
Mts. Ore. 8250 ft. VIII, 21,
1928.

Open Meadow surrounded
by heavy stand of
~~extra~~ pines. P. contorta

Mel. ~~[illegible]~~ 47 R other
wos & Mtt. Very scarce
except in extremely
restricted spots in
mountain meadows.
Mel. borealis all Mt.
With the above in
middle of meadow,
one very restricted but
large colony in richer
grasses beside small
stream there. Small
to very small juvs
in small numbers,
the adults in many
cases teneral.

1538 + 49 = 1587

28.59 John Day, Grant Co, Ore.
3150 ft. VIII. 22. 1928 Valley
slopes with dry short
yellow (six weeks) grass,
large clumps of composite
and small bunches of
intense green stiff
composite.
Syphia pseudoincl. a few
there
Amphist few there

Cedar occidentalis occurs same
Mel packardii 2 ♂ few "
Mel mex mod common "
Dissod cer 1 only seen "
Frin pentana scarce "
Hesp. Lilse pratensis very
scarce in brittle small
bushy bright green
composite — only marde
2 ♂ 1 ♀ H 10 ♂ 1 ♀ R (Mund
= Sulivanzia sarothrae (Pursh)
Britton & Rusby?).

1587 + 38 = 1625

28.60 Mouth of Moon
Creek, John Day River,
Ore. 6 mi W of Mt. Vernon
Grant Co. 2700 ft VIII.22.
1928.

Frin nig 2 ♂ common
Coeloz wallula 2 ♂ few

1625 + 2 = 1627

28.61 Mouth of
Cummings Creek, John
Day River, 9 mi E of
Dayville, Grant Co.
Alt. 2600 ft. VIII.22.1928
Slopes of six weeks grass,
composites & some sage-
Hesp. viridis 1 ♀ R
Mel. cuieiens 1 ♂ in sage,
very scarce there
Agoseris glauca common
Euphrat very few
Conozoa " "
Circo undul all ♂, small
colony all in one spot
among lava boulders in
dry stream bed.

1627 + 24 = 1651

28.62 ✓ 6 mi W of Dayville
~~Grant~~ Co. 2700 M VIII.22.
Wheeler
1928. Iowa Hills, only
veget some six weeks
grass & sage.
Prim cuneiculus
common on bare small
lava fragment soil among
sage.
Prim ~~cuneus~~ gracilis
very few in sage
Mel cinereus same
Sylvo dorum small
numbers
Ad virginia 1♀ only
1651 + 21 = 1672
Hesp viridis 1♀ R

28.63 4 mi E of Antone
~~Crook~~ Co Ore. VIII.22.1928
Wheeler ≐ 4000 ft.

Top of ridge, conifer forests to East

Grim campestris mod common.

Grim pectinata fed

Dissot spurcata very fed

Agnot decorum fed

Aulac elliotti forcard

Red wing " "

1672 + 24 = 1696

28.64 Badger Creek, 6 mi E of Mitchell, Wheeler Co, Ore. VIII.22 1928. 4150 ft.

Caminula 1R dry grass meadow

Cirot undul 1H on volcanic boulders in wash

1696 + 2 = 1698.

28.65 2 mi NW of
Mitchell, Wheeler Co.
Ore. 2550 ft, VIII.23.1928

Flat benchs covered
10 to weeks grass and
occasl. compositae
Disost spicata
fed in small volumes
Trim caerulescens
mod abs.
Juncus circinatus very
fed in edge
Trim sinuc mod
common.
Ore calif / WWJ in
juniper, abrid at night
Nearby juniper slopes
nothing else heard

1698 + 16 = 1714

28.66 Foot of Sargent Butte, 4 mi NW of Mitchell Wheeler Co. Ore. West Branch Creek 2500 ft.
VIII.23.1928

Disjoint car 2R. fed present.

Asp. moriluesis near-by very scarce in large bunches of gray green composite (28-66 = Chrysothamnus nauseosus consimilis) D. & H 14 WWF. (Greene) Hall

Cordilleranus all H, & fed in le weeds grass at foot of hill among sage, atriplex, sarcobatus & composite

Cuephist all H fed dance

Bedal cuejuna very fed dance all H & WWF

Trim foulana occasional among sage on side hill

Trim pallidiff general

Mel cinereus very scarce in sage WWF & H.

1714 + 25 = 1739

28.67 Blue Mountain Road summit, head of Ochoco Creek, Wheeler Co, Ore. VIII.23. 1928. 5289 ft.

Heavy conifer forest, mostly yellow pine & some fir. Chordtiff occasional in forest grass.

Pull fascicles very local in forest mesic of grass and forest mountain plants — exactly Hepplewhite's H. oreophilus here. 2 ♀ Rittors H

Prim suff occasional where openings in forest particularly in bare spots

Pull alpinus very local as fascicles but locally common in milder grasses of glades.

Prim fontinale & fice cumulus occurring in glades particularly

in dry grass nearest central patches of bunch grass.

Neel Jewett locally in mod mos in latter

1739 + 39 = 1778

28.68 Scissors Creek, near Ochoco Mill, Crook Co. Ore. 4225 ft. VIII.23.1928. Very similar and to 28.67 but Chort st more common

Neel fasc all ht, in wetter underg

Trim sieff as 28.67

Neel alpinus fed in richer underg.

Cratyspedes very fed in open spots.

Steirox fed in very low brush in open spots.

1778 + 30 = 1808

✓ 28.69 Lava beds SW of Prineville, Crook Co. Ore. 3350 ft VIII.23. 1928. Sage brush flat, bare lava-adobe, some sage brush

Circoc. all W, very scarce

Trim gracilis generally distributed in mod large numbers, very alert & active but flying short distances

Trim cyanopennis mod nos but local, near cliffs, same.

Conozoa 1 ♂ near road.

1808 + 28 = 1836

28.70 Sisters, Deschutes Co. Ore. VIII.23.1928 3175 ft.

Yellow pine forest, Park-like — bluebunch grass, occasl composites, some sage

Red bortlii all ft very few locally.

Brunnia shastana 30/19 ~~30~~ ft 10/12 R sauce.

Trifol sieff occasl nos general.

Mel incerens common generally in grass & sage.

1836 + 24 = 1860

28-71 6 mi W of Sisters, Deschutes Co. Ore. Wadsworth Highway VIII.24.1928 3500 ft

Yellow pine woods open flat, medery. scattered mountain bitter brush & ~~other chaparral~~, some pine chard yellow grass

Brunnia Shastana
1 ft in above grass
Trim stuff 1 ft.
no other auth seen;
considerable search.

1860+2 = 1862

28.72 Windy Point, 4 mi
NE McKenzie Pass,
Deschutes Co. Ore. 4860 ft.
mountain mahogany
in conifer
forest. Only auth seen
Nelson 1 ft

1862+1 = 1863

28.73 1 mi above Windy
Point (as 72) 5012 ft.
Fox tail pines with little
sand grass growing in
~~bare dust.~~ (pure sand)
Trim stuff 1 ft only
auth seen.

1863+1 = 1864

28.74 2 mi W of McKenzie Pass, Lane Co. Ore. 4800 ft
VIII. 24. 1928.

Lush mountain herbage in open spot of fox tail spruce forest.

Acrydium 5R in the vegetation, not in bare spots.

1864 + 5 = 1869

28.75 10 mi W of McKenzie Pass, McKenzie Highway near Alder Spring Lane Co. Ore. 3700 ft.
VIII. 24. 1928 In dense conifer forest, largely of spruce. Brushy undergrowth

Acd 1/4 H in basket
Trine Duff 1 H
All dette sense

1869 + 2 = 1871

28.76 McKenzie Bridge, Lane Co. Ore. 1800' ft.

Natural opening in dense brush & huge conifers. Dry yellow grass, sleaves etc.

Well nice general in very large mos Grim Juliana Circos small colonies.

See below 28.78 Mediba

1871 + 8 = 1879

28.77 3 mi SE of Sisters Same env as 28.70, same alt Deschutes Co. Ore. VIII.25.1928

Circo undul very few on bare volcanic sand among brush

Grim near Koebelei

1R 2H same, usually about dead pine logs or tops.

Bruneria 1st # first seen in small composite

Well cuereus fed in small, ~~with mahogany~~ bitter bush

(1 ft high clumps) seed
composites, a little sage
Cedal 1 ft H 17 wd 7. very
scarce.

1879 + 17 = 1896

28.78 8 mi SE of Sisters,
Deschutes Co Ore. 3150 ft
VIII.25.1928
Much bewedes grass,
composites & sage with
junipers on sand,
areas of lava fragments
Carex inflata occas
on latter, fro elsewhere
Trim blue eg locally
mod common on sand
between bushes. This
sp is extremely alert,
flying up with a sharp
whirr. The flight is
somewhat erratic & on
its often fitches suddenly
to the ground, making
them hard to follow.
When in the mid they
are unusually active,

flying out much more quickly than most spp of the genus unless it is kept in active motion.
Onul cinereus occasional in sage & other brush
Cordillacris 1R 11H, very scarce generally but one colony found in 6 weeks grass interspt w tufts of another fine grass. Consid. search necessary to gather the series.
Conozoa common on & about adobe beside road. all of our not kept yellow ct 28 17, red ct 11 57

So 28.76
Neduba 1♂ stridulating loudly in upper part of large open bush on edge of forest. 25 mm approached w light was not at all wary, recommencing song

soon after it was
worked off each time,
but constantly moving
about beneath and so
very difficult to locate.

to 28.78 (continued)
Steiroxys 10'H in thick
patch of coarse grass
1896 + 58 = 1954

28-79 Tumalo, Deschutes
Co. Ore. 3180 ft VIII.25.1928
On lava bench,
environment much
as 28.78 otherwise but
less grass.
Trim blue leg geo
Circot undul "
cordilleoris occasional
in more grassy (coarse gr)
spots
Nul cuneus ~~occ~~ mod
common in sage &
other brush.

1954 = 14 = 1968

√ 28·80 Meadows of Deschutes River, 18 mi SW of Bend, Ore. 4200 ft
VIII·25·1928

Grassy meadows, somewhat yellowed this time of year - areas with some strawberry.

Veel. devastat? mod common & general there.

Stuirioxys in low bush on edge of meadows 1 ft.

Calyptedes in dry almost ~~open~~ open area on a few yellow pieces 1 R

Prim. suff. on all mos there.

Sarydinia H, in moist green grass beside rivulet.

1968 + 17 = 1985

28.81
3 mi West of Walker Mtn.,
Klamath Co. Ore. 4750 ft.
VIII.26.1928.

Trim near Rocbelei

LH, very scarce on volcanic ash between low ~~with mahogany~~ bitter bush brush, a twiggy composite and some wisps of yellow grass in foxtail pine forest.

Mel saltator gr. red leg very scarce in ~~with mahogany~~ bitter bush — They jump down to the ground to feed but on over approach leap powerfully for the bush and quickly hide in its mat of twigs — Long search secured the series, nearly 1 to 100 bushes being ~~prunus~~ 20 ♂♂ & 1 ♀ WWJ

Oxalypedes very scarce

+R 1H

1985 +15 = 2002

28.82 2 mi SSE of Dry Butte, SE of Crater Lake, Klamath Co. Ore. VIII.26

Yellow & for Tail (4800 ft)

pines on hilly area — underg same as 28.82 but more composite (28.82 = Haplopappus bloomeri angustatus (Gray) Hall).

Mel saltator gr. now found in composite, appar feeding on it. Dec. more common locally than at 28.81 but made more active springing quickly into the dense clumps of ~~[illegible]~~ bitter bush ~~[illegible]~~ (read of day prob cause of activity).

Trim ruff 1♂ only one seen

2002 + 7 = 2009

1 dragon fly

28.83 Lowrotte, Klamath Co. Ore. 4700 ft VIII.26.1928

Bradypodes 1 ft. In middle of small volc. ash prairie w scattered pumice — Wisps of grass only veget. Long search, no more

Eralypedes 1 ft only other with sem, on border of same prairie for tail pine forest!

2009 + 2 = 2011

28.84 South Rim of Crater Lake, Ore. 7050 ft. VIII.26.1928

Slope & valley, volcanic ash — grass mod tall & yellow scanty, much lupine & a few Hendsonian plants —

S. suffrus very scarce there

Cammula v scarce in thick short yellow grass along dry stream bed.

Mel near washington
or altitudinum? 2 ♂ H
on small ridge of
volcanic boulders in
open thickly clothed
with alpine plants &
parties (Eno 28-84 =
Eriogonum umbellatum Torr.). A
sluggish sps. all seen
taken. 1 ♀ W ♂ ice fine
dry grass on volc ash
slope.
Bradypnotes 4 ♂ H, same
as Mel. ♂ above feed
quite active, scrambling
vigorously to cover.
Brunneora small mos
in same situ, males
are heard stridulating.

2011 + 22 = 2033

28.85 Crater Lake Camp,
~~Klamath~~ Ore. 6000 ft.
VIII.26
I. suffusus 1 R. Very
scarce in fresh mud.
Herbage on volc ash
& about fine forest Ore

2033 + 1 = 2034

28.86 ~~Cuma~~ Rim of Anna Creek Canyon, Crater Lake Nat. Pk. 5700 ft. VIII.26.1928

Fir forest w little grass & low bushes

S veiw 1# in grassy spot

Cirsiyp 1# same

2034 + 2 = 2036

28. ~~86~~ 87. Scott, Klamath Co. Ore. VIII.26.1928 and 27th, 4300 ft.

small glade in forest of fir tail & yellow pine (f-tail 2 leaf 1 inch) (yellow 3 leaf 8 in) (also a pine 3 leaf 3 in) — volc ash w much short yellow grass, low thick ~~mahog~~ bitter bush bushes and much plant 28.84

Steirox yo locally common particularly in areas mostly grass.

Iratyp small nos gen distributed

Nel saltator qr gen
common, particr in
areas of ~~gut. eucalyp.~~ bitter bush
and plant 28.84.
Dedalea sordida gen
common, rl more so
than the above & not
as good at peeling
shutter in inaccess
bushes
~~The~~ Trim near Poulsen
gen common
Brunoria locally in
mod nos.

2036 + 168 = 2204

28·88 (3 mi SE of Ft. Klamath) Just below old Ft Klamath, Klamath Co. Ore. 4400 ft. On Scott River, VIII·27·1928

Dry grassy areas with some composites in foxtail & yellow pine forest w a few aspen.

Mel saltator ad H very few in ~~situ~~ ~~mahogany~~ open low bushes & composites.

Conozoa very common in dry pine sward yellow grass w small bare areas.

Trim near fontana 1100 ft

Trim suffuscus 2H very few on almost bare ground under scattered yellow pines — This is the favorite habitat of this species generally.

Cumula small nos is Conozoa.

Cualeff 1 acme

2204 + 29 = 2233

28.89 Klamath Agency, Ore. 4350 ft VIII.27.1928
Prairie near marsh
short grass, composite & other prairie plants, some clumps of ~~[illegible]~~ bitter bush ~~[illegible]~~ & sage nearby
Erigeron pseudosalsuginosus locally common in richer short prairie veget.
Amphiachyris dracunculoides in short dry grass & plants
Musotia acuminata mod common locally sam. all H.
Steiroxys 1 H same.
Mel. mex or dwarf, general in small numbers.
Juncus gracilis all R in sage brush area.
2233 + 47 = 2280

28.90 Olene Klamath Co.
Ore. VIII. 27. 1928.

Arc calif 15 ft stud in sage & thin climbed into tall composite, after dark, juniper zone on edge of yellow pine forest. Few others heard.

2280 + 1 = 2281

28.91 S End, Swan Lake Valley, Klamath Co. Ore.
VIII. 28. 1928 4250 ft.
Sage brush flat with sand yellow grass

Trim gracilis gm dirt in small mos.

Conozoa small colonies locally in bare spots.

Trim fontana fed on hill slope, juniper & yellow pine.

2281 + 15 = 2296

28.92 NW of Yainax Butte, Klamath Co. Ore. VIII.28.1928. 5350 ft.
Hills of yellow pine & a little incense cedar underg. Forest underg mod prominent but nothing in it.
S. suffusus 5% forest bare spots
2296 + 5 = 2301

28.93 Sprague River Valley (about 5 mi) west of Bly, Klamath Co. Ore. 4400 ft. VIII.28.1928.
Adobe volcanic flat country thickly covered w pine short yellow grass.
D. recurvata very few
Prim poulsenii quite distr but very common in pebbly volcanic wash.
Conos mod mos thin

better place.
Mul decast common
in dry short grass.

2301 + 21 = 2322

28.94. ~~SW (5 mi)~~ 5 mi
SE of Bly, Klamath Co.
Ore. VIII.28.1928 4750 ft

Circot nudul grew
on lava boulders
among sage on hill
w grew juniper. 1 ft

Prim ~~grace~~ fontana
very few locally same
1 ft

2322 + 2 = 2324

28.95 Quartz Valley,
Lake Co. Ore. 5475 ft
VIII.28.1928.
Fine yellow pine mountain
forest with considerable
undergrowth but 0
in it.

In open spots —
1. sept grew
2. nudul at 1 w 0 f
3. fontana grew

2324 + 7 = 2331

✓28.96 Cottonwood Creek, at Baldwin, False Co. Ore. 5000 ft. VIII.28.1928

Iris gracilis mod nos in high sage

Convolvulus fed there on edge of alkali grassy area.

2331 + 4 = 2335

✓28.97 2 mi S of Bulls Prairie, Warner Mts., Ore. 6500 ft. VIII.29.1928

Forest of yellow pine & a little white fir. Underg mod thick for these mountains

Iris tenax fed

Iris sieff general in small nos.

Cammassia 1 in small area of dry yellow grass.

Cratylpedes 1♂

2335 + ~~8~~ 10 = ~~2344~~ 2345

28.98 Drabe Peals Trail
Warner Mts Ore 6700 ft
VIII.29.1928.

T. suff 1 ♀ R

28.99 Bulls Prairie
Warner Mts Ore. ~~6800~~
6900 ft.

In small sage, dry grasses & mtn meadow plants at Ranger Station
Sturioxys 1 small colony in restricted area all H
Mel boreali 1 H there
Trin. suff few in dry almost bare areas
Cammula mod nos in dry yellow grasses

2345 + 11 = 2356

28.99B Drake Peak,
Warner Mts., Ore.
8100 - 8218 ft VIII. 29. 1928
Fine limestone fragment
soil. Very low sage
and a little B bush
(bitter) scand mountain
plants, fine tufts of
yellow grass.
Brunnera very few
in above area. open
above. fox tail pines
Xanthippus in colonies
pines, same, widely
separated
Steiroxys 10 ft scarce
just above timber 8100 ft.
Melanoplus devast.
same as Brunnera
but; small nos.
Frim cuff few near
upper edge of forest,
and one on summit
Circot medial few

in bare spots on summit.

2356 + 37 = 2363

28.100 14 mi SW of Plush Lake Co, Ore. 5700 ft VIII.29. 1928

Sage brush flat with grassy area.

Prim gracilis mod. nos.

Prim. fontana 1

Prim vinc mod nos.

2363 + 8 = 2371

28.101 11 mi SW of Plush Lake Co Ore. 5800 ft. VIII.29. 1928. High desert volcanic small rounded rocks & very low sage.

Xerob mod nos along road & in other bare spots.

Cricot. medel small nos, same, more alert & active than the preceding.

Neel dwarf small nos in sage

Xanthe 1 jus on bare ground

2371 + 18 = 2389

28.102 Plusia, Lake Co. Ore. Warner Lake Valley 4500 ft VIII. ~~28~~ 29. 1928

Lower adobe slopes rising to mouth of volcanic canyon — much sarcobatus & few dry desert plants.

Spiny crestata very common generally.

Spiny blue-leg - few locally.

2389 + 29 = 2418

30

28.103 Bluejoint Ranch.
Lake Co. Oregon. 4350 ft.
VIII.30.1928
(24 m. north of Ukiah)

Sarcobatus & some large clumps of composites on largely bare adobe.
Prim gracilis generally distributed in moderate numbers.
Prim latic local in small numbers ~~some~~.
Prim vestata very few in areas of greater slope.
Eudoplus very scarce in sarcobatus 10 37 H 27 W 2 T
secured after long search
2418 + 49 = 2467
28.104 Mule Spring, Harney Co. Ore. 4625 ft. VIII.30.1928
Sage on bench of fine broken rock shingle — Desert sno.
Pul dors 10 W 2 extreme desert type, in short yellow grass.
Prim dec 2 W 2 in rock shingle among scant short yellow grass

Iris pallidiflora 2N
among compositae at
canyon mouth in
dry area.

2467 + 5 = 2472 (Artemisia ~~-~~ ordinaria (Nutt.) probably)

28.105 "white Sage" Flat
between Mule & Buzzard
Spr. Harney Co. Alt.
(50 mi N of Pluch) 4600
ft. VIII.30.1928.

Iris gracilis only sp.
present, in small
nos.

2472 + 8 = ~~2479~~ 2480

28.106 00 Ranch Flat-
crusted alkali with
scant growth of (see before 28.107)
salt grass where
I. pallidiflora (mostly
without very dried)
was found in small
nos. Difficult to
take on account
of the glare and the
fact that they virtually

disappear against the background in time

They take wing — much search WWJ 10 ♂ 8 ♀ 2

2480 + 21 = 2501

33 Ranch Harney Co. Ore., VIII.30.1928 4050 ft.

28.107 Volcanic Hills 24 miles SW of Burns, Oregon. 4000 ft. VIII.30.1928

3 Coleoptera only

28.108 12 mi S of Burns Java escarpment 4150 ft VIII.31.1928

Trim cerulescens small colonies in sage only along edge of escarpment with large boulders about. V. jungens

Trim cyanescens 14 only one seen, in sage back from edge of escarpment a shard distance.

Iris gracilis here,
just among sage on
just above top of survey,
Aeschnor 1 only, seen,
no name sub. WWJ.

2501 + 16 = 2517

28.109 8 mi S of Burns,
Harney Co, Ore., 3800 ft.
VIII.31.1928

Natural prairie of
short yellow-green
grass, some strawb.
Cammula occasl there,
very common in
alfalfa stubble.
Mel. packardi 1 WWJ
there, only one seen.
Nestor 1 ff in short
grass among composite
Melator mexicana 1 small
scattered colony
there, extending into
natural prairie.
Mel. fuscicornis mod
nos in swall of green

higher grasses.

Lupinus very few, dance.

Steironys 1 bicolored & WWT, dance, only one voice.

Prim gracilis very few on bare adobe among composites.

Culoc all tt, very few in natural prairie.

2517 + 31 = 2548
30

28.110 Lawen, Harney Co. Ore. 3800 ft VIII. 31. 1928
Coarse bunch grass & sarcobatus. Only op sure

Prim veris very scarce on bare adobe between dance

2548 + 4 = 2552

28.111 1 mi so Princeton, Harney Co. Ore. 4175 ft VIII. 31. 1928 Sage brush on lava hill.

Aurora 1R Were only
one seen.
Iris cristata 1H seen
Iris gracilis very
freq. seen
Mil mex 1H seen
2552 + 6 = 2558

28.112 N end Steens Mts.,
Harney Co Ore. 4250 ft.
VIII.31.1928 Lava beach
w sage and much &
weeks grass (blue, yellow,
short)
Iris gracilis freq
in sagebrush
Iris fontana 2H among
sage in volcanic
pebbly soil.
Mil viscosus very
scarce & extremely
active in sage 1H
Mil mex 1H seen
few there
Aquilegia formosa v
few in & weeks grass.

2558 + 13 = 2571

28.113 ~~Northern slope of Steens Mts., Harney Co. Ore. 4925 ft VIII.31. 1928~~

N. end Steens Mts, Harney Co, Ore. 5150 ft. Boulder strewn flat w much dwarf sage and shorn yellow grasses. VIII.31.1928

Agneod. only sp abu, mod abundant in the latter

2571 + 5 = 2576

28.114 ~~Burnt Flat,~~ Jen Cent Lake, Harney Co, Ore. 3925 ft (mottes VIII.31.1928)

28.115 Data lined out under 28.113

Prime fontana 10 ft

Agneod 17 ft

2576 + 2 = 2578

✓28.116 Juniper Ranch, Harney Co., Ore. 3800 ft.

Sage & rabbit weed flat & slopes, much bluebunch grass IX 1 1928

Avoch 1#1W07 Scarce on bare soil among sage where there were lava boulders.

Trim cyanopsis fair on slopes among sage on bare soil.

Trim gracilis scarce but more on flats

Trim crest very fair scarce on flats where the soil was loose.

Tymot. so scarce in bluebunch grass among sage on slopes

2578 + 20 = 2598

✓28.117 Mauri Lake,
Harney Co., Ore. 3700 ft.
~~VII~~ IX.1.1928.

Adobe slopes with sarcobatus, atriplex areas, russian thistle getting thicker with taller yellow grass to "lake" – An adobe flat margin & more yellow grass.

Trim rice mud now in spots, yellow grassy areas toward lake.

Trim gracilis in bare spots among sarcobatus

Mel cicerius very scarce in scattered sag

Trim blue leg (-near lake) 1# on bare adobe among sarcobatus near lake margin.

Trim chest, very few on sandy adobe among sarcobatus.

Trim latif 1 W.W. Found one seed, among sarcobatus

Cammula 1# in short fine thick growing yellow grass on border of lake
only one specimen
Well, mix 2# fine same
Cerrolu 1 on bone slides in sarcobates
Foraminifera very common & widely distributed but only in zone of short yellow grass & sarcobatus near margin of lake.

2598 + 30 = 2628

28.118 Ridge N of Alvord Ranch, Harney Co. Ore. 3850 ft. IX.1.1928
Volcanic pebble ridge covered w sage brush. An exceptionally good locality, but nothing to suggest this before actual investigation.
Trim caerulipennis very common, more so than we have ever seen it — Tools 3 cells

one sweep of net —
this one to just that
as a female alights
the nearby males
again fly over and
alight nearby.
Prim. retrema only.
Prim. blue-leg local
and not at all common.
Aeroch. sw.

28.119 ✓
^ 2628 + 67 = 2695
Wild Horse Canyon,
Steens Mts, Oregon.
4325 to 4400 ft. IX.1.1928
Hesp. sued wing 17 ♂
in thick heavy clump
(the usual) composite,
no others, consid. search
Ele. mores common
in willows along creek
Paroc. fasc. vicinus
in rich green meadow
grass, mod. common

Mus. bivitt 1 ♂ only one seen in alfalfa.
Dissosteira carol. 1 ♂, several nos in alfalfa.
Mel. femur-rubr. some
Mel. cinereus seen fed in gray sage on hillsides
Mel. mex. some.
Circot. medul. seen fed among sage on hillsides
Trim. fontana small numbers, common.
Trim. pallidipes common in flats.
Chort. curtipes 1 ♂ in green grass of wet meadow
Parabacillus 2 R beaten from le weeds & grass.
Ped. sugina 1 ♂, same on flat.

2695 + 54 = 2749

Stiraplura fed fed seen in le weeds & grass, none Sept.

28.120 Spring at foot of Westernmost of a group of Peaks, Steens Mts, Oregon IX.2.1928. 7150 ft. Among sage, rim-off of spring

Circ sp small nos.

Trichr sp. occasional

Mel mix very few

Cummula in nitre meadow mod co 2749 + 11 = 2760

28.121 Lower slopes of Westernmost of a group of Peaks, Steens Mts, Ore. IX.2.1928, 7850 ft. All R & WWJ

Circ sp small nos

Trichr sp few, most on borders of aspen thicket

Mel mix very few

~~2749 + 11 = 2760~~

2760 + 10 = 2770

28.122 Westminster Peaks, Steens Mts., Ore.
IX.2.1928. All Mt

Bumelia 1st in pine tufts of yellow grass at 8400 ft. 14 in very stunted sage at 9200 ft.

Lycium very fro bed generally distributed from base to summit at 9500 ft. Usually on small bare spots and boulders among very stunted sage.

Prunus emoli very fro on very steep bare slit in unique formed by winter snow and ice at 8800 ft.

Pinus ponderosa very fro in very stunted sage up to 8700 ft.

2770 + 10 = 2780

28.123 Alvord Desert,
Harney Co, Oregon.
4050-4100 ft IX.3.1928

Sporobolus airoides west, very
few in salt grass on
edge of flat adobe "desert
or lake".

Sporobolus pallidus small
nos same. Apparently
the type without very
band does not occur
here due to the fact
that the soil is not
highly alkaline.

Sporobolus Cryptandrus
small nos same and
up slope in sage to 4100.

Poa unioloides IX, very
scarce in sage

Cuscuta pellucida
in thick short yellow grass
about a small spring

Carex pascuica 1 in
short green grass same

Sporobolus gracilis [illegible] sage

Triglochin maritima same

2780 + 19 = 2799

28 ✓ 124 4 mi N of Field,
Harney Co. Oregon
IX. 3. 1928

Shingle & adobe desert
with atriplex and a
few sarcobatus, also a
low spiny desert plant
now with scarcely any
leaves.

Dendraemus locally
mod common, on latter
on on bare shingle - Often
seen to leap off small
spiny plant toward
another grasshopper, NOTE
alighting nearby -

Trim blue leg fro on
shingle.

Trim cyanopennis mod
numbers scene.

Trim gracilis very few
seen NOTE at least 1 of
was bleish, not greenish
wings.

Trim vivid small nos
on adobe & shingle

NOTE This was a place of distinctly more desert environment than we have previously seen this Trip.

2799 + 54 = 2853

28.125 Miller & Lux Ranch North of Black Rock Desert, Nevada. IX.3.1928
Cammula 1 all ✱
Mill. 2

2853 + 3 = 2856

28.126 Foothills of Pueblo Mts. 4 mi S. of Doan Ranch (Oroville) Harney Co. Ore. IX.3.1928 4075 to 4100 ft
S single slopes, much atriplex and spiny bush
Prim cyanocephalus on single slopes near canyon mouth among atriplex & some grasses
1 ♂.
Cerodonodes 1 WW ♂ on lower slopes, only one seen.

Bot. very common locally on shingle in only spiny beds growing there.
Trim bluegr very free on shingle lower slopes benches & ridges, not on slopes.

2856 + 47 = 2903

28.127 Pueblo Valley, 1 mi so of state line, Humboldt Co. Nevada. IX.3.1928
3925 ft.
Adobe alkali flat with salt grass
Mel dwarf very common in latter
Trim pallidiflo not common. Important series showing all grades from wing band to bundles — It was noted that some small groups

were partly pallid & showed no very band at all, others had it well intermediate, while in some spots dec nidio vegetation was noted. This was apparently in direct response to degree of alkalinity of the soil in the immediate vicinity. Some spots (these partic where the bandlets occurred) were heavily impregnated there being a rough increase tation of alkali, much of the area was smooth white but showing alkali (sweet bandlets) while along a nearby road the sembauhemus was not alkaline.

Trim batyasc 2 W W 7 very local & scarce

2903 + 55 = 2958

28·128 ~~NE~~ foothills of Pine Forest Mountains, Humboldt Co., Nevada (11.8 mi from Denio) IX·3·1928. 4850 ft.

Travel & sand in wash in foothills, much loose sage on both sides, some yellow grass in gravel

Aeroch 2# very few on good

Prim ~~equisetum~~ arvel

mod common

Prim nim sance

Prim fontana. desert type small numbers

Prim gracilis few

Conozoa small numbers only on gravel in wash.

2958 + 33 = 2991

Mid. desert on sidehill

28.129 Happy Creek Station
Humboldt Co. Nevada IX.
3.1928. 4100 ft.
about 40 moths

28.130 Sodhouse Point,
Humboldt Co. Nevada.
3980 ft. IX.4.1928
(Quinn River) pasture
of salt grass; flats of
rabbit weed, grayia &
sarcobatis.
Trim latic larvae in area
of tall clumps of rabbit weed
Trim lunc small nos
in salt grass pasture
mel dwarf same
Cammula 2R very scarce
& local, same.
Conozoa very common
locally same & in dry
bed of Quinn River

2991 + 21 = 3011

28.130A 4 mi E of Cane Springs Station (Amos) Humboldt Co. Nev. 4725 ft. IX.4.1928 1 Sage brush on high divide

Prim cyanip small nos

Prim gracilis occasional

3011 + 11 = 3022

28.131. 8 mi E of Paradise Valley, Humboldt Co. Nev. ~~#1~~ on Little Humboldt River. 4550 ft IX.4.1928 Rolling adobe hills with much sage, few adobe flat areas & very small spots of volcanic gravel.

Prim blue leg 1 R on latter, only one seen.

Derot 1 R on adobe area, only one seen

Prim latis on adobe open area & among adjacent sage, locally

frequent. not very wild

Trim ~~[illegible]~~ cumulipinnus
most frequent locally
in sage brush areas,
extremely wild.

Trim crist same but
on more powdery soil

3022 + 25 = 3045

28.132 Bull Head Ranch,
Humboldt Co., Nev. 4750 ft.
+ IX.4.1928.

Trim crist 1 st loose adobe
in sage brush

3045 + 1 = 3046

28.133 8½ mi SE of Bull
Head Ranch, Humboldt
Co. Nev. 5125 ft. IX.5.1928

Low sage on bare adobe
pile slopes & in wash

Trim gracilis small nos
Arroch 1 q WW f

Trim blue by 1 st

3046 + 9 = 3055

28.134 Kelly Creek Ranch, Humboldt Co. Nev. 5150 ft
IX.5.1928.

Flat with much rabbit weed (28.134 = Chrysothamnus nauseosus consimilis (Greene) Hall), sharp adjacent slope with sage.

Trim pallidus on almost bare open areas on flat.

Trim gracilis not frequent among sage on slope.

Trim blue-leg very few, same.

Trim cyanipennis, 1 of 14, only one seen, same.

Aerochr. very few, same.

Trim crist very common on sandy wash near sage.

Conozoa common on almost bare open spots of flat.

Ely. calif. beaten from

rabbit weed (sp. see above 19 H.

Hesperod. med w 19 WWF from rabbit weed.

3055 + 35 = 3090

28.135 Desmond Ranch, Humboldt Co. Nev. 4900 ft IX.5.1928.

Rabbit weed & sage flat and adjacent adobe slopes with sage

Hesp one colony in rabbit weed over about 20 x 20 ft, elsewhere none. 12 R, 3 H, 1 WWF.

Trim gracilis small numbers

Trim blue-leg many fed on small areas of volcanic pebbles on slope all H.

Trim orist as gracilis

3090 + 35 = 3125

28.136 Spring Creek,
S of Midas, ~~Humboldt~~ Elko
Co. Cal. 5550 ft
IX.5.1928

Convolvulus small nos
on dusty slope bare
areas along stream

3125 + 3 = 3128

28.137 Midas, ~~Humboldt~~ Elko
Co. Nev. 6200-6800 ft
IX.5.1928

Foothills of _____ Mts.
Steep hill slopes with
(3 Purshia tridentata (Pursh) DC
"bitter-bush" "juniper" —
Prim fontana fruit 6200
to 6800 ft
Prim cyanicaps all A small
nos on bare rocky
spots on ridge summit
6600-6800 ft (did not
go higher)
Circot nudicl fruit
same but only at 6800 ft.
Mel ones mountain

extreme type, / ✓ in better bench 6200-6600 ft.

3128 + 24 = 3152

28.138 12 mi E of Midas, Elko Co., Nev. 5500 ft. IX.5.1928

Rabbit weed flat (same large sp as 28.135)

Prim gracilis 2N scarce

Acsp 2N in rabbit weed, only after much beating

3152 + 4 = 3156

28.139 Head of Rose Creek, Tuscarora Mts., ~~16½ miles west of Tuscarora~~, Elko Co. Nev. ~~6675~~ ft IX.5.1928

Mel mer mountain type 18 & 19, 62-6300 ft. very scarce in dwarf sage

3156 + 2 = 3158

28.140 mi S of Tuscarora, Elko Co. Nev. 6450 ft IX.5.1928

28.141 Tuscarora Mts.
E of Tuscarora, Elko Co
Nev. 6675 ft. IX.5.1928
Grim. fontana 4# on
bare above & moist in
sage

3158 + 4 = 3162

28.142 Tuscarora, Elko Co.
Nev. 6800 ft. Sage covered
hills. IX.6.1928
Grim fontana small
nos, scattered thru
sage.
Grim cynocephalus 14
there
Grim gracilis here
too there

3162 + 8 = 3170

28.143 Tuscarora Valley,
4 mi SE of Tuscarora,
Elko Co. Nev. 6075 ft.
IX.6.1928.
Rabbit weed on flat,
beyond areas of meadow
and some marsh
grass, sage on

rolling swell.
Chort. curtis very fed in marsh grass.
Camnula 1 ♯, mod common in dry yellow meadow grass.
Mel. mex large, here. rare
Mel. mex mountain type there and in sagebrush sage, scarce.
Trim fontana? See on adobe w walks in sage.
Trim granilis See on same adobe in sage.
Trim pallidipes 1 ♯ in pasture.

8170 + 19 = 3189

28.144 ♯ hills NW of Elko, Nev.
6375 ♂ ♯ IX.6.1928
Hills with sage & normal & stunted mountain sp (= artemisia tridentata nova (Nels.) Hall & beltersuse)
Rabbit weed 1 — juniper scattered.
Trim caerulipennis 1 ♯ in sage near juniper

Med med mountain sage type - Quail was in stunted sage, very active and took full advantage of high wind blowing at the time - leaping & flying.

Agropyron 2# in weight of fine yellow grass in area of stunted sage

Dipod fed on bare adobe spaces in sage.

Sex 1 ♀, 1 ♂

Prim fontanum, scarce in sage
" gracilis " " "

3189 + 25 = 3214

28,145 ~~to mouth of~~ Secret Valley W of ~~Pass~~, Ruby Mts., Elko Co. Nev. IX·6·1928. 5800 ft. (Secret Creek)

Prim campestris 1# in rabbit weed & sage near meadow (very dry)

Dipodomys very few there

Prim gracilis scarce

Chord curtip 2# in taller green grasses on edge of dry meadow – tall seen Tabin

Cammula 1# in yellow grass of dry meadow, only one seen.

Nul nul sage mountain type, small nos as Herd.

3214 + 16 = 3230

28.146 (Ranch Valley), E side of Secret Pass, Ruby Mts, Nev. 6950 ft
IX.7.1928 Rabbit weed, sage, mountain sage, mahogany & bitter Beele-

Cryptica small colonies in sage & rabbit weed near grassy meadow.

Nul. nul mountain sage type, occasional, scarce.

Hsp neomexicana IR 2WDF very scarce in large green rabbit weed (= 28.135)

Frice Jonesiana gen distr in small numbers.

Mustabre 1# in Cryptica, only one seen, gen scarce

I. palleda gen scarce

3230 + 34 = 3264

28 147 Hills beyond E
entrance Secret Pass,
Ruby Range, Mt.
6100 ft. IX.7.1928.
Whitish gray clayey adobe
w a few rock fragments
dwarf rabbit weed (28.147
Chrysothamnus greenii
=filifolius (Rydb.) Hall) and
dwarf mountain sage —
few juniper on hill
slopes.
Berberis 2 H 1 W of very
scarce at base of hill
in above environment
Prunus blue-leaf all H
scarce, same.
Acer neg terminus 1 H
same in dwarf rabbit
brush, this bright green
all the rabbit brush
in this area had
turned yellow, making
the specimen very
conspicuous.
Aquilegia 2 H, all seen
taken, same place

Mel occidentalis 1 ♂, only one seen, very active, same place.

Sled b. orientis occasional in dwarf sage 10, 17 WW 7, others ♂, — both at pot of milk & on flat.

Sibanentis 1 ♂, on flat among dwarf rabbit weed, run & dodged on ground with astonishing agility

Trim cyanopennis 1 ♂.

Very scarce on bare ground among dwarf sage & rabbit weed on hillside w. cows jumpers

Mel sagebrush all ♂ few in dwarf sage all bare of stops.

Denot few on bare ground among dwarf sage & rabbit weed on flat & lower slope

3264 + 39 = 3303

28.148 Sandy adobe area in desert
SE of Ruby Mts.

6600 ft IX.7.1928
Pure sage brush 1st ft only
only one in this extreme
desert, area of dwarf
rabbit weed & dwarf sage

3303+1 = 3304

28.149 N base of Butte
Range, Elko Co. Nev.
6950 ft. IX.7.1928
Sage, a little sarcobatus
areas of low atriplex &
dwarf rabbit weed
Prim blue lag very
rare on gravel, hill
tops.
Phacelia one on
gravelly bare soil under
~~sar~~ sarcobatus w/ ft
Prim pallidus!

3304+4 = 3308

28.150 E base of Butte Range NW of Currie, Elko Co. Nev. 6850 ft IX.7.1928.
Trim crist WW 7 1 in gravelly area of low atriplex.
3308 + 1 = 3309

28.151 Gruns Ranch, White Pine County, Steptoe Valley, Elko Co. Nev. IX.7.1928 6640 ft
Trim crist few on bare loose adobe among low atriplex all ft.
Aeroch 1 WW 7 same
Trim blue leg all ft occasional, same.
Derot all ft, few same.
Cnolop 1 WW 7 in saccobrates - likely one seed.

3309 + 19 = 3328

28.152 Cherry Creek, White Pine Co., Nev. 6700 ft. IX.8. 1928. Atriplex & purple, stem spiny bush, bare adobe, some gravel.

Trim crist locally in a few large colonies, generally absent.

Trim blue-leg 3H. very few in above microrum.

3328 + 14 = 3342

28.153 4 mi SE of Cherry Creek, Steptoe Valley, White Pine Co. Nev. 6600. IX.8. Atriplex and sarcobatus desert.

Trim Mondia sp near gracilis. Ved nos on bare adobe in sarcobatus areas, few where atriplex took its place.

Trim crist few, most in atriplex area.

Dunot very few, same.

Anolop 1H in atriplex, one other seen there & 2.

jumped into sarcobatus bushes. So very active and adept at hiding that they could not be captured though the bushes were demolished and carefully examined.

3342 + 46 = 3388

28,154 West base of Schulbourne Pass, Shell Creek Range, Ind. 7300 ft. IX. 8.

Trim blue lig 1# in stunted sage on bare adobe slopes. Only orth seen. Are not wings more richly yellow than is usual?

3388 + 1 = 3389

Silinentria 1# on bare adobe under sarcobatus bush, extremely active

28.155 Schellbourne,
White Pine Co. Nev.
(Shell Creek Range)
7750 ft. IX.8.1928
Scattered juniper & pinon
much sage.
Neel canonicus gr. fed
in sage.
Trim gracilis 2R same.
Trim cyanocephalus 1#
on step slope in sage
near juniper, also seen
at 8000 ft.
Trim fontana, fed,
widely separated, in
sage.
3389 + 12 = 3401

28.156 Schellbourne Pass
summit, Shell Creek Range,
Nev. 8200-8300 ft IX.8.
1928 All #.
Cnotelli mediabatis
1 on bare gray limestone
outcrop.

Pine nut with sage type
Very good in shadscale
sage.
Pinus fontana association
Pinon & mtn mahogany
scattered forest.

3401 + 8 = 3409
(west of Deep Creek Range)

28.157 Antelope Valley,
White Pine Co, Nevada.
5 mi S of Tippetts. 6475
ft. IX.8.1928. Dwarf
sage & rabbit weed,
otherwise bare adobe
bottle. See also 28.158
Aeroplot 1 WW J. on butte
Prime blue leg 1 R rabbit
weed flat.
Prime palliduiflorus on butte

3409 + 4 = 3413

28.158 Antelope Valley,
White Pine Co. Nevada
3 mi NE of Tippetts
6325 ft. IX.8.1928
Wash thru low butte, a
little rabbit brush, elsewhere
sage & atriplex closed

Prim latifasc (apparent prone others this trip)
Pri in wash, as above
Acroch 1 sum bud not taken.
Dirot 1 R on shingle w sage & atriplex
Prim blue leg, locally in small nos, same.
Prim crist 1 WW ♂ in wash.

3413 + 18 = 3431

28.159 Antelope Valley, north end, & Elko Co. Nev.
6300 ft. IX.8.1928
moths

28.160 Ibapah, Tooele Co. Utah. Deep Creek Valley.
5450 ft. IX.9.1928.
Sarcobatus, atriplex, areas of tall rabbit weed in wash
Prim kaley (to 28.161) 1 WW ♂ in wash among sarcobatus & rabbit weed on flat adobe only 1 seen
Prim nel to gracilis mod common on sarcobatus flat, common in above area.
Prim crist mod comm

among sarcob on adobe on lower hill slope & edge of wash.

Aeolop very scarce in atriplex & sarcobatus. 1X 1928 F.

Prim pallidep fair in wash & dry green grass area. L 10 28.161

Aeroch very few on bare adobe among atriplex on flat top of knoll

Prim pale blue leg 2R same as Aeroch.

3431 + 55 = 3486

28.161 4 mi N of Ibapah, Tooele Co. Utah Deep Creek Valley 5350 ft. Sarcobatus & Tall rabbit weed. IX.9.1928

Species as 28.160. Notes on T. latey & pallidep below here.

3486 + 26 = 3512

28.162 Gold Hill Pass, Deep Creek Range, Utah. 6000 ft. IX.9.1928

Aeroch 1X on bare adobe hillside w very low scattered crush 3512 + 1 = 3513

28.163 Summit, Gold Hill Pass, Deep Creek Range, Utah. 6600-6700 ft IX.9. 1928 Sage & dwarf sage, scattered juniper on steep slopes, small bare & stony areas w dead yellow grass

Acroch 2H 2Wa 7 very scarce on bare slopes among sage on hillsides

Prim cyanipennis 2H on craggy hill summit, bare ground among sage & juniper. 6700 ft

Nuc Tristis in dwarf sage 1H only one seen after much search.

Agnot 1R on fine shingle open area among sage.

Prim pallidus 1R

3513 + 9 = 3522

28.164 Gold Hill, Tooele Co. Utah (Desert Hills N end of Deep Creek Range) 5475 ft. IX.9.1928 Dragia? (Atriplex confertifolia (Torr. & Fremont) Wats.) and dwarf sage on gravelly slopes and steep " wash.

Trim latic 1WWJ on bare soil, gravelly.
Trim stremma generally fed, locally common in bare gravelly spots of wash.
Neel tristis all H, occasional in dwary sage. (= 28.164B)
Microtus tridentata nova (Nels.) Hall
Neotoma - very scarce no grayia(?) all H.
Neel canonicus gr. fed same.
Trim pale blue leg, very scarce in gravelly wash 1WWJ.

3522 + 41 = 3563

28.165 3 mi SW of Dold Hill, Tooele Co, Utah (Desert Hills N end of Dugway Creek Range 5525 ft. 18.9.1928
Very dim undoubtedly to 28.164.
Trim stremma common in wash.
Neel tristis 1H
Neel. canonicus gr 1

3563 + 10 = 3573

28.166 5 mi SE of Dold Hill, Tooele Co, Utah (Desert Hills N end of Deep Creek Range) 5200 ft. IX.9.1928 Very low desert small clumps of brush, sandy in places w tufts of a small rabbit weed & sparse yellow grass.

Paropomala 1H, 1WD ♂, in latter areas — very scarce

Nel canonius gr 1WD ♂ same.

Prim. shuma very fed, same.

3573 + 5 = 3578

28.167 7 miles SE of Dold Hill, Tooele Co, Utah (as above) 4775 ft. IX.9.1928 Very low desert shrubbery, wash with patches of low salicornia like (28.167A = Kochia vestita (Wats.)) and spots with green weed like plant (28.167B = Peritoma lutea (Hook.), Rd. bilobata

Prim. blue leg 1H 1R very scarce in shrubby areas

in wash.
D. sphærica fair generally in wash, but common in area of plant 167B.
Dendr all # small numbers in area of plant 167B.
Geoloplus 1 ex in plant 167A. Only one seen.
Frin pallidip fair in wash
This was the last spot where any large brush at all was to be found.

3578 + 33 = 3611

28.168. ✓ Edge of Salt Lake Desert, 12 mi SE of Gold Hill. 4300 ft. IX.9.1928
Salt encrusted adobe flat with Salicornia
Frin pallidip gr, weak wing band 2# & 10 W 7 seen
fair local

3611 + 6 = 3617

28.169 N. end of Dugway Mts, edge of Salt Lake Desert, Tooele Co, Utah 14.9.1928

Moths

28.170 10 mi E of Dugway Range on Salt Lake Desert, ~~Tooele~~ Tooele Co. Utah ~~43~~ 4400 ft. IX.10.1928

Low dunes of adobe sand.

Prim palidip 1R

Paropsonala 3R in tussocks of fine long yellow grass. All were taken

Stiraphera small pup very fed in small colonies in sand

3617 + 6 = 3623

28.171 Hills - S end Cedar Mts, E side of Salt Lake Desert (29 mi E of Dugway Range) Tooele Co. Utah 5050 ft IX.10.1928

Prim cgermleypunnis 2, very scarce on bare soil among very dry sage

3623+2 = 3625 Skull Valley
28.172 Orrs Ranch, Tooele
Co. Utah. 5000 ft. IX.10.1928
Low spiny desert plants
& sarcobatus, large
rabbit-weed & some
sage in wash.
Trim gracilis 1st in
latter, only one seen
Trim near gracilis 1st,
same, same.
Trim latus 1 only
Trim crist small nos
in sarcobatus & low
spiny plant, fed in
rabbit weed & sage.
Onel canonicus gr very
few in sage.
Hesp mocalensis 1st
Eastern prairie high
rabbit weed, same as
it was found in in Nevada
Agnot very few in
both above areas where
a very little short
yellow grass grew.
Dund all R in low spiny
bushes area.

Aeroch 1A on bare soil in area of sage & rabbit weed.

Oecanthus 1A beating from rabbit weed.

3625 + 31 = 3656

28.173 Willow Spring, W side of Fisher Pass between Onaqui & Stansbury Mts Tooele Co. ~~Ut~~ Utah. IX-10-1928. 5975 ft.

Trin strinna 2A on steep brownish sand slopes w very little sand loving plants, juniper all about.

Nel canonicus 1r 2A fig in scant brush there

Dissost carolina 1R on bare ground in area of rabbit weed near stream

3656 + 5 = 3661

28.174 Fisher Pass, between Omaqui and Stansbury Mts Tooele Co. Utah. 6600 ft.
IX.10.1928
Limestone with sage, rabbit weed & juniper.
Trim Joulaia mod common locally in above
Agoseris decorum 1, only one seen.
Mel canonicus gr, very few in sage
Circot rabula. 1 ft, very rare in area of limestone fragments ~~& no veget.~~

3661 + 11 = 3672

28.175 St. John, Rush Valley, Tooele Co. Utah. 4875 ft. IX.10.1928
Tall rabbit weed, sage, Russian thistle & pasture grass veget.
Agoseris small nos in open spots & very scarcely low veget.
Decot Here in small nos on bare spots.
Mel. nel. fed same.
Mel canonicus gr small nos in rabbit weed & sage

but so active I could
scarcely hold them very,
tight to take.
Sitanion hystrix 1W, very
& very active as Speed,
only one seen.
Prim latis 1W very fed
in rabbit weed area.
Prim stevenia 1W(?) F
same.
Prim pallidus small
mos same.

3672 + 31 = 3703

28.1/6 Stockton, Rush
Valley, (3 mi S of) Tooele Co, Utah
4750 ft 12.10.1928
Sarcobatus adobe flat.
Prim near g. nailii quite
common.
Prim latis 2W, fed
Aeroch 1W, only one seen
Prim crist very fed

3703 + 23 = 3726

28·177 Morris, Joodle Valley, Utah. IX·10·1928. 4350 ft.

Stenopelmatus on bare adobe in camp at dawn IX·11.

Centro 17♂ on bare adobe at camp fire shortly after dark. 17♂ in deep ditch adobe & boulders, running along Jake Bonneville beach, miles from timber

Centro mottled 2♂ (1R1♂) 17♂ in same ditch after dark

Series of jumps taken there then by long search.

Long legs, no banded, fed in same ditch at dawn three.

Mell. ones: asleep in leaves (short yellow) opposite & small scattered patch weed of beach plain.

3726 + 25 = 3751

U = Utah I = Idaho O = Oregon N = Nevada

	U	I	O	N
Carabac. coloradus	O	O	X	O
Litaneutria ocul.?	X	O	O	X
Acryd. granulat	O	X	X	O
Pseudogs. brachypt.	X	O	O	O
Amphitornus colo.	O	X	X	O
Cordilacris sp	O	X	X	O
Gomphocerus plat.	O	X	O	O
Brumeria alticola?	X	X	O	O
" sordida	O	X	O	O
" skaslana	O	O	X	O
Orphulella sp.	O	X	X	O
Chortippus curti?	X	X	X	X
Psolocessa sp. jun.	X	O	X	O
Agenotettix deorum	X	X	X	X
Aulocara elliotti	O	X	X	O
Arphia frigida?	X	O	O	O
" pseudoniet.	X	X	X	X
Camnula pellucida	O	X	X	X
Xant. cor. buckelli	O	X	O	O
Cratypedes neglect.	X	X	X	O
Lyprus interior	X	O	O	O
Dissost. carolina	X	X	X	O
" spurcata	X	O	X	O
" venusta	O	O	XA	O
Spharagem. equale	X	X	O	O
" collare	O	X	O	O
Derot. kayd. riley.	X	X	X	X
Melanop. kiowa	O	X	X	X
Melanop. pardal.	O	X	O	O
" nevadens.	O	O	X	O
Conozoa valida	O	X	X	X
Circotett. rabula	X	O	O	O
" undulat.	O	X	X	X
Aroch. carl. strep.	X	X	X	X

	U	I	O	M
Trimero. arenacens	O	X	O	O
" brunneiceps near	O	X	O	O
" caerulipennis	X	X	X	X
" campestris	O	X	X	X
" cristata	X	X	X	X
" cyaneifrons	X	X	X	X
" fontana	X	X	X	X
" gracilis	X	X	X	X
" Hobbelei ?	O	O	XA	O
" latifasciatus	X	X	X	X
" pallidifrons	X	X	X	X
" " sabine type?	X	O	X	X
" sparsa near	X	O	O	X
" suffusus	X	X	X	O
" stienna	X	X	X	O
" blue-leg	O	X	X	X
" pale " "	X	O	O	O
" blue-green "	O	X	O	O
" blue-leg sand sp.	O	O	XA?	O
Paraponnala sp.	XB	O	O	O
Schistoc. lineata	X	O	O	O
Aeolophus sp. l.w.	XB	O	O	O
" sp. mod. red. w.	X	X	X	X
Hesperot viridis NW	O	X	X	O
" "	X	O	O	O
" nevadensis	X	X	X	X
" " terminus	O	O	O	XB
" pratensis or sp	O	O	X	O
Dendroica. aenigma	O	X	X	O
" tacchii	O	O	XA	O
" " orientis	O	O	O	XB
Cnotaliot. melanas.	X	O	O	O

	U	I	O	N
Bradymoles obesa?	O	X	O	O
" pinguis?	O	O	X	O
Melanoplus alpinus	O	X	X	O
" artemisiae	O	X	O	O
" bivittatus	X	X	X	O
" borealis	O	O	X	O
" brunneri	O	O	X	O
" canonicus mex	X	O	O	X
" cinereus	O	X	X	O
" confusus	X	O	O	O
" dawsoni	X	O	O	O
" devastator	O	O	X	X
" fasciatus	O	O	X	O
" femur-rubr.	O	X	X	X
" infantilis	X	X	O	O
" mex. mex	X	X	X	X
" " mex. typ	O	O	O	X
" militaris	O	X	O	O
" montanus	O	X	O	O
" occidentalis	O	X	O	X
" ore, oregonensis	O	X	O	O
" " nubicola	X	X	O	O
" ~~oregonensis~~	O	O	X	O
" packardi	X	X	X	O
" saltator gr	O	O	XA	O
" tristis?	XB	O	O	O
" utahensis	X	O	O	O
" washington. mex	O	O	X	O

	U	I	O	N
Pranerogt. furcata	X	O	O	O
Conoc. fasc. vicin.	O	X	X	O
Nedula cornuata	O	O	X	A O
Capriobolus trunca	X	O	O	O
Amaborus simplex	O	X	O	O
Steiroxys. sps. (?)	X	X	X	O
Centrop. banded sp	X	O	O	O
" mottled "	X	O	O	O
Cyphodeirismonstr.	O	O	X	O
Stenopelm. fuscus	X	O	O	O
Oecanthus calif.	X	O	X	X
" 4punct. arg.	X	X	O	O
" niveus	O	O	X	O

Specimens	648	954	1661	578
average per day	185	111	104	105
no. "	3½	8½	15½	5½

A Pacific coast element

B Southern element

MH, JR & WWJ all collecting

Mt. Quirauk 10 High
Rock, Blue Ridge Mts.,
Md.

VI-24-1937

Sphaerog. prob. ~~phaseolus~~
many large colonies
of small jivs in
short fine grass under
scattered deciduous
trees, in beds of dead
leaves and v. small
jivs. on bare
rock surface.

Sunderia prob. fuscata
v. small jno in dry
sod mountain decid.
forest undergrowth.
Lth. davisi 2217, very
jno very locally D —
one in a spider web bridging
a tiny — under projecting
rock. 2R 1/4 H

Amphia amphigena very
rare D. A in open area

Cladonia virgata A in open area - small colony of adults.
Cladonia c. cristata 1#, beaten, A in open area.
Dendrolycon. notundifolia. Quite abundant in dense alluvial green foliage of shrubs along trail in decid. forest
Nub. confusus a very few E.
Nub. mamillus large colonies of pines - fruiting and fully - A in open area, B and occasional E.

Roberts, Hilding & Hibard

Cove Mtn.

Cove

Summit (above road) Rt

Tuscarora Ridge, Pa.

VI, 24, 1937.

Dry gravelly ridge summit, mostly dead. and many pitch pines. Tuber bared, grasses etc.

Nomod crist 3 beating not at all common.

Cumbelyc rotundif as before.

Vicl. corpusc, same but more numerous.

Sudel. prob perc. 2 ♀ and 1 ♂, same.

Ett. davisi 1 large 1 ♀ Mrs. Roberts.

Nun. manus same as before, only 1 ad ♂.

Near Lancaster, Pa VI, 24, 1937. Unog. saxo 1 dark ♀ short wings & gyns on open hill top.